Conclusion: Increased UA level was independent predictor of increased morbidity and mortality in a cohort of ambulatory patients with chronic heart failure.

0102

Frequency and outcomes of hyponatremic ambulatory patients with chronic heart failure

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Backround: Hyponatremia – lowering of sodium in blood serum below 135 mmol/l – is a frequent disorder of electrolyte metabolism in patients with chronic heart failure (CHF). It is an established predictor of adverse outcomes in hospitalized patients with reduced ejection fraction.

Aim: To evaluate the incidence of hyponatremia in ambulatory patients diagnosed with chronic heart failure in order to establish a correlation with the risk factors, evolution and prognosis.

Methods and Results: We examined the prevalence, risk factors, and long-term outcomes of hyponatremia (serum sodium =< 135 mEq/L) in ambulatory HF with reduced EF The cohort consisted of 1240 admitted in the therapeutic unit of heart failure (TUHF) between 2006 and 2014. Hyponatremia was present in 19.6 %. Mean serum levels of natremia and were 131.3 meq/l. Hyponatremia was associated with male sex, diabetes, strock attack, coronary heart disease. Compared with normonatremic patients, those with hyponatremia had lower systolic blood pressure and lower functional capacity during six – minute walk. Also, Hyponatremia was associated with cardiac decompensation, diastolic dysfunction (p=0.014), severe renal insufficiency and higher doses of diuretics (p<0.0001), whereas beta-blockers were inversely associated (P<0.0001).

Conclusion: Patients with heart failure and hyponatraemia on showed a higher risk of long-term morbidity than patients without.

0007

Low left ventricle ejection fraction in STEMI's patients: experience of University Hospital of Casablanca

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Heart failure is a clinical syndrome resulting from impaired function of the myocardium. This study sought to describe and compare specific characteristics, baseline clinical profile and intrahospital mortality of patients admitted in intensive care unit (ICU) for acute myocardial infarction with sustained ST-segment elevation (STEMI) according to their left ventricle ejection fraction (LVEF).

Methods: We included 79 patients over first quarter 2013. Patients with LVEF < 40% constituted group1 (n=22; 27.8%) and were compared to patients' group2, n=57; 72.2% with LVEF ≥40%.

For each patient, cardiovascular history, maximum Killip class, period chest pain, heart rate (HR), troponine level, kidney function and CRP were recorded.

Results: The average age was 59.6 years. Patients' group1 were older: 64.4 years against 57.8 years for patients' group2. Sex ratio did not differ with a male predominance 68% in both groups.

Patients' group1 were more frequently hypertensive (50% vs. 36.84%) and had history of coronary heredity in 9% of cases vs. 1.75% in group2. They presented in a shorter chest pain time (5.4 hours vs. 6.7 hours) and were more frequentely tachycardiac (HR≥100 bpm): 40.9% vs. 17.5% in group2. Patients in group 1 had significantly more congestive heart failure (22.72% of patients were ≥ killip II vs. 1.75% in group2) (p = 0.006). Troponines were positive in 95% in both groups with an average of 47.01 ng/ml in group1 vs 42.38 ng/ml in group2. Group1 presented lower mean Glomerular Filtration Rate (GFR): 58,2ml/min vs 87,16mL/min and higher CRP (average 93.11mg/l vs 50.28mg/l in group2). The short term Survival was higher in group2 (94.74% vs 86.37%).

Conclusion: Our study shows that older age, tachycardia, CHF, prior hypertensive, and higher CRP were more associated with moderate to severe impaired LVEF at admission in patients with STEMI. We think taht a rapid assessment of LVEF in the IUC will identify a population at risk who needs sharper hospital care.

0464

Young heart failure: epidemiological, clinical and etiological aspects in the University Hospital Ibn Rochd of Casablanca

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The aim of the study was to analyze the epidemiologic, clinical and etiologic aspects of heart failure of the young age to 18 to 45 years.

It consisted of an observational study realized in the day hospital unit (DHU) in the service of cardiology of the University Hospital Ibn Rochd of Casablanca during 60 months (January 2009 to December 2013) comparing young patients (to 18 to 45 years) to older. The completion of a Doppler echocardiography was necessary to include the patients in the study.

Results: The median age of the patients was of 37.12 ± 3 years with a sex ratio of 2/3.2 vs. 69.7 years and a sex ratio of 2/3.1. Young subjects were less frequently hypertensive, diabetic and dyslipidemic (p<0.001). The electrocardiogram found only 16.9% in complete arrhythmia by auricular fibrillation in younger vs. 11.3% in patients more than 45 years. Cardiac echography found a dilation of the left ventricle among 47.9% vs. 42.7%, a systolic dysfunction of left ventricle among 35% vs. 66.2%. We noted that heart failure with preserved ejection fraction (HFPEF) was predominant in this population (p<0.001). The etiologies were: hypertension 31.8% vs. 1.6% (p <0.001), heart valve diseases 17.1% vs. 10.3% (p =0.003), the peripartum cardiomyopathy 6.9% vs. 0.1% (p <0.0001), dilated cardiomyopathy 14.1 % vs. 8.4 (p=0.0023), the alcoholism 2.8% vs. 1.2% (p =0.22), ischemic heart diseases 22.2% vs. 60.1% (p <0.001), arhythmia 2.8% vs. 0.3% (p <0.001), the cardiothyreosis 2.8% vs. 1.1% (p=0.19) and myocarditis 1.4% vs. 0.9% (p <0.001). Young subjects were poorly compliant with beta-blockers and Aldactone because of their side effects.

Conclusion: Heart failure is a serious and frequent pathology in North Africa. It affects young and active subjects too with a predominance of HFPEF. Causes are dominated by hypertension.

0041

Sleep disordered breathing in heart failure: nocturnal desaturation as a novel prognostic marker. A prospective cohort study on 376 patients

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Background: Sleep disordered breathing (SDB) is common in patients with heart failure with reduced ejection fraction (HFrEF). Increased apnoea-hypopnoea index (AHI) is predictive of poor outcome. Nocturnal desaturation (ND) is associated with increase in NT-proBNP in HFrEF. The prognostic value of ND as compared to AHI is still unknown.

Methods and Results: Three-hundred seventy six consecutive patients with stable chronic HFrEF and left ventricular ejection fraction (LVEF) ≤45% were prospectively screened for SDB between 2005 and 2010 by polygraphy. SDB was defined by an AHI≥5 and sleep apnea (SA) by an AHI≥15. Mean age was 59±13 years, mean LVEF 30%±6%, and mean AHI 18±10; 310 patients (82%) had SDB. The predefined composite primary end-point (death, heart transplantation or left ventricular assistance) occurred in 98 patients (26%) within 3 years. Minimal oxygen saturation